Health sciences peer-mentoring: A student-staff-alumni collaboration.

Remona Mekdessi, Bret Curan, Brian Lam, Allison Grech, Melanie Nguyen
Faculty of Health Sciences, The University of Sydney

Abstract

To what extent do peer-mentoring programs eliminate the stress and challenges associated with the transitioning from high school to university? In 2012, a peer-mentoring program was launched for first year students in the Bachelor of Health Sciences. This Nuts and Bolts session will focus on our experience as program administrators and mentors in promoting belongingness, appreciation for diversity and the development of skills among our mentees. We will examine the effectiveness and benefits of our program based on survey data and literature. This session will also include interactive discussions on what makes the perfect mentoring program and how to foster a sense of belonging for first year students in both their course and university.

The transition into university is both an exciting and challenging experience. It involves negotiating expectations, understanding independence and re-orienting oneself to a different learning context. Students entering their first year in higher education report a desire to belong, a sense of loneliness and feelings of uncertainty about independent learning, support services and course selection (Heirdsfield, Walker, Walsh, & Wilss, 2008).

Feelings of loneliness are an artefact of the larger class sizes and are exacerbated by cross-campus study. This is particularly true for students in our Faculty. In March 2012, there were 425 first year students enrolled in the Bachelor of Health Sciences. Many students also attended classes at both main and satellite campuses. This arose as a common concern for students when reflecting on their experiences:

“...we had to spend a lot of time at main campus, and everyone else was at [the satellite campus], it was almost like we didn't fit anywhere...” - Student Mentee

Large student numbers also challenge students to develop an appreciation for, and ways of working with, diversity. The interdisciplinary nature of healthcare and multicultural context in which students will work, highlight the need to facilitate collaborative experiences of diversity. This process should start in first year (Horsburgh, Lamdin, & Williamson, 2001).

Peer-mentoring programs have demonstrated success in reducing loneliness, fostering a sense of belonging to the university, facilitating academic success and improving retention (Heirdsfield, et al., 2008). Peer-mentoring integrates first year students into the university culture and humanises the environment by fostering a sense of camaraderie and belonging (Stenfors-Hayes, et al., 2010). Benefits for mentors include a sense of fulfilment, improved self-esteem, refined leadership and interpersonal skills (Eby, Durley, Evans, & Ragins, 2006; Glaser, Hall, & Halperin, 2006; Rose, Rukstalis, & Schuckit, 2005).

However, there is currently a lack of strong evidence supporting one structure for peer-mentoring program. Studies showed that mentoring benefited participants in many configurations (group and one-on-one, formal and informal; Eby, et al., 2006; Emelo, 2011;
Consultation with students was required to determine which would be most suitable for our needs.

Although existing literature provided a framework for our program, it alone did not present sufficient evidence for supporting belongingness in large student groups. Research on university mentoring tended to use academic performance or retention as indicators of success (Alonso, Castano, Calles, & Sanchez-Herrero, 2010; Anderson, 2009). This did not fit with the aim of our project. Moreover, these programs typically targeted students of particular social groups. Our mentoring program aimed to foster a sense of belonging and to facilitate the transition of all first year students, not just particular groups, from high school to university. As such, student feedback and literature were integral in developing this program.

Furthermore, few studies address the unique challenges of inter-campus travel in a large student cohort. Our challenge was to create a peer-mentoring program to support the specific needs of being a first year student of this degree - belongingness, appreciation for diversity, teamwork skills and leadership skills. We drew on previous studies of mentoring programs and student consultations to develop a mentoring program tailored to our first year students.

The mentoring program

The Mentoring Committee, consisting of five undergraduate students (from years 1-3) and the First Year Experience Coordinator, designed and implemented this program. Student volunteers from Years 2-4 were mentors and worked in pairs to support groups of 6-8 first year students (mentees). Groups were formed according to majors and students were able to sign-up with friends. Mentors had face-to-face training on how to initiate, maintain and conclude mentoring relationships, degree-specific information and university services.

Our mentoring program encompasses a combination of structured, formal and informal mentoring as well as social activities. Mentoring commenced during Orientation and concluded mid-way through the final semester of first year. At Orientation, mentors and mentees formally met and participated in a day of group discussions and games. Mentors exchanged details with their group and were to organise weekly meetings (30-60 minutes) in weeks one to four. During these meetings, mentoring groups discussed topics that first year students commonly found challenging (university expectations, assessments, majors). Following these sessions were formal exam study workshops. Although these workshops were open to all students, mentees received an informal mentoring session with their mentors afterwards. Two social activities also took place.

During the program, the Alumni Relations Team sought to include alumni mentors. A Mentors and Alumni Evening was established to present mentors with certificates recognising their contribution to the university. The evening was followed by discussions with alumni mentors, allowing current students to see the opportunities available to them post-graduation as well as receiving career and general study advice. This created a mentoring community of existing and past students.

Our program is innovative in several ways. Perhaps most important is that the program has been designed, and continues to be run, almost entirely by students. So, it continually evolves to meet the needs of students. For example, student feedback showed a preference for having mentors available during mentees’ first exam experience and when they make decisions about electives and majors. As such, the program extends beyond the orientation weeks and concludes in the final semester of first year.
This program provides additional opportunities for personal and professional development. Mentors gain leadership experience by becoming part of Mentoring Committee, and industry contacts through the Alumni program. More broadly, this project has enabled five Health Sciences student program leaders to be supported in developing their research and project management skills. The Mentoring Committee won two grants, completed an ethics application, designed and implemented this research, collected and analysed data and jointly wrote this paper. This hands-on exposure to evidence-based practice marks this program as original in its joint mentoring of first year students, senior student mentors and undergraduate researchers (at the time the grant was won and the project implemented, students were in their first, second or third years. There were no Honours students).

Program Evaluation:

The mentoring program was open to all enrolled first year students in the general Health degree (n=425). The impact of the mentoring program was evaluated formally through a repeated measures, quasi-experimental design. Surveys were administered to all first year students at the beginning (time 1) and end of semester 1, 2012 (time 2). This enabled examination of the change in students. The study design also allowed comparisons between students who participated as mentees and students who did not (non-mentees). All mentors and mentees were invited to participate in a survey explicitly evaluating the program at its conclusion. One hundred and seventy one students completed the first survey and 117 participants completed the second. However, only 37 first year students (83.3% female; Median age = 18 years) completed both surveys, of whom 81.1% were mentees in the program. The data presented here are from respondents who completed both surveys and the Mentee Evaluation Survey (n=73).

Measures

The 58-item Student Experience Survey consisted of four subscales examining sense of belongingness, appreciation for diversity, teamwork and leadership skills. These subscales were adapted from the Sense of Belongingness Instrument (Hoffman, Richmond, Morrow, & Salomone, 2003); End of First Year Openness to Diversity/Challenge (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996) and Cultural Awareness Scale (Rew, Becker, Cookston, Khosropour, & Martinez, 2003); Leadership and Personal Development Inventory (Carter, 1989); and Teamwork Skills Profile (Strom, Strom, & Moore, 1999), respectively.

The Mentee Evaluation Survey is a non-standardised 20-item survey asking participants to evaluate the perceived benefits of this mentoring program and make suggestions for improvement. The survey included quantitative (Likert scale questions) and qualitative responses.

Results and impact

Survey data

Participants’ change in sense of belongingness, appreciation for diversity, leadership skills and teamwork skills was calculated by subtracting their score on the Student Experience Survey at time 1 from their score at time 2. Participants each had four change scores.

To examine the effect of the mentoring program in facilitating a sense of belongingness, appreciation for diversity, leadership skills and teamwork skills in first year students,
comparisons between scores for mentees (n=30) and non-mentees (n=7) were made. Due to the discrepancy in group size, a non-parametric test, the Mann-Whitney U Test, was used. No significant differences were found on any of the dependent variables (all p>0.28).

Upon closer inspection, some students identified as mentees but had not attended mentoring sessions. To explore whether level of mentoring participation explained the between-groups finding, number of sessions attended was correlated with scores on the dependent variables. Significant positive correlations (all p<0.001) were found between the number of mentoring sessions and sense of belongingness (r_s=0.50), appreciation for diversity (r_s=0.63), leadership (r_s=0.47) and teamwork skills (r_s=0.53).

Additionally, students who had participated in more sessions were more likely to agree that they felt settled into university (r=0.70, p<0.001), felt motivated (r=0.59, p<0.001) and reassured (r=0.57, p<0.001) and understood university requirements (r=0.62, p<0.001). It seems, therefore, that the non-significant difference between mentees and non-mentees could be explained by the number of mentees who had not attended a session.

Reported reasons for mentee non-attendance included timetabling clashes (32% of mentees who indicated that they did not attend a lunch session), sessions not being organised by mentors (25%) and being too busy (16%). Many mentees also reported not continuing with the sessions because they had received support and no longer required mentoring (7%). Analysis of mentor evaluation data is currently taking place to determine the reasons for not organising sessions. The hypothesised reason is inter-campus timetabling.

**Impact on the wider community**

In addition to these findings, the success of the mentoring program is exhibited in its impact on individual participants and the wider university community. Fifty percent of mentees are interested to become mentors as a result of their experience as a mentee in the previous year. Graduating mentors and Alumni Relations will form part of an extended network of support. Alumni will become part of the formal structure of this mentoring - alumni supporting mentors and mentors supporting first years. This can create a community beyond graduation.

The mentoring program has also been used as a template for Belong@FHS, a faculty-wide mentoring program to be offered in 2013. Mentoring is now embedded into the Faculty learning and teaching structure as an opportunity for undergraduate students. Students may also take on leadership roles within the program as part of the Student Mentoring Committee.

This mentoring program is successful in the community that it has created. The student leaders who established, evaluated and are now disseminating the findings of this program, have been mentored in a community of leadership and research. Their experiences with grant writing, ethics applications, data collection, analysis and dissemination have fostered interest in research. One student has gone on to complete Honours and two students have expressed keen interest in applying for Honours in 2014 (when they are first eligible). One student has also received three offers from the Sydney Medical School Summer Research Scholarship program and is undertaking supervised research in the 2012/2013 summer break.

Future challenges include streamlining the communication process and addressing reasons for mentee non-attendance. Preliminary findings suggest difficulties in timetabling and availability and communication as barriers to participation. Discussions will include practical
tips and hints for implementing a mentoring program for diverse and large student numbers as well as questions about the assumptions of fixed mentoring (the same mentor-mentee relationship). For example, is it better that first years develop a relationship with one person or is it enough that support is given even if the mentor changes each time?

**Questions / issues for discussion**

- How can we continue to provide links to support for students who discontinue mentoring?
- What effect does mentor-mentee grouping have on diversity and belonging?
- Should a peer mentoring program include academic support? Why/why not?
- Can e-Mentoring provide a sense of community and belongingness?

**References**


